CONCLUSION

Infertility is more traumatic for female and male. But early systematic detection and treatment will decrease the sufferings in a family, this requires awareness and education. It provides a better solution and helps to maintain a good relationship between the couples.

INFERTILITY

"Children are evergreen rhythm of life"

INTRODUCTION

Marriage is considered as a primary relationship in our society and it is also a social are to build a community. Similarly family life and child bearing are viewed as the primary duties of an individual and parent-hood a necessary developmental milestone. Sometimes it is not possible to have a child for so many reasons, of the one conditions could be infertility. Infertility is like a broken bone, when it heals, it will be stronger than ever.

MEANING OF INFERTILITY

Infertility is defined as a failure to conceive within one year of having regular unprotected coitus.

INCIDENCE

The factors responsible for infertility are many and varied, with an incidence in men up to 30% and in women up to 40%. Approximately one-third of cases of infertility involve problems with both partners, and in one-third of couples the causes of infertility remain unexplained. The most common causes are ovulation failure and sperm disorders.

CAUSES OF INFERTILITY

The causes of infertility can be seen in two ways from gender point of view are mainly divided into two groups:

I. Causes in Female
II. Causes in Male

I. CAUSES IN FEMALE

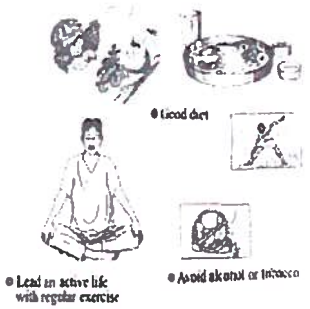
1. **General causes of infertility are**
   - Age above 35 years
   - Obesity
   - Tobacco smoking
   - Mental disharmony between husband and wife, fear of having sex

2. **In female sexual dysfunctional causes of infertility are**
   - Lack of libido
   - Vaginismus (Spasmodic contraction of the vagina)
   - Dyspareunia (Painful Coitus)
   - Exhaustion due to over work

3. **Infertility due to anovulation in female are**
   - Anorexia nervosa
   - Stenosed Cervix
   - Dysfunctional uterine bleeding (DUB)
   - Poly cystic ovarian disease (PCOD)
   - Hypothyroidism ,
   - Drugs - Antidepressant, cyclical hormones

4. **Defects in female reproductive organs which causes Infertility are**
   - Poor penile penetration due to rigid hymen and narrow vaginal introitus
   - Stenosed cervix
   - Cervical polyp
   - Blocked fallopian tubes
   - Abnormal uterus
     - Bicornuate uterus
   - Congenital factors

- Don't listen to "horror stories" from other patients or friends. Keep your own counsel in the waiting room. Exchange only helpful, positive suggestions with others.
- Make it your business to be calm as possible when you are here for treatment. This wouldn't guarantee that you will get pregnant, but it can only help.
- To help develop your sense of calmness, try yoga, meditation, full body massage, journaling, walking.... ANYTHING that helps you keep your balance.



- Recognize that the staff is here to help you anxiety and anger care natural feelings but won't help you (or anyone else) to let staff be the recipient of these feelings.
- Recognize that infertility is COUPLES issue. Keep the lines of communication open with your partner, It is huge stress in a marriage, Get outside help if you get stuck.

COPING STRATEGIES

In this section, we will look at the emotional stages of infertility and strategies to deal with them. Infertility is a life altering experience. From your self esteem, to your plans and dreams for the future, relationships with friends, family and even your spouse can all be affected. Sadly, attention seems to be focused on the physical aspects of infertility, and the emotional aspects often go ignored and untreated. People just don't realize how emotionally challenging and overwhelming it all can be on a couple.

The stress and sorrow between the couple due to infertility are as follows:

- The women is often the first to realize that they may have a fertility problem the man might need to be convinced that medical intervention may be necessary.
- Feelings of frustration, anger, denial, guilt, blame, self pity and jealously begin to occur.
- Emotions and disagreements in, the marriage become magnified.
- Feelings of loss of control are common and sometimes uncomfortable.
- Feelings of failure and low self-esteem are normal, as are feeling of guilt, blame, shame and embarrassment.
- Need for secrecy. Explaining the infertility testing to others can be very embarrassing and can result in isolation from friends and family.
- Sense of sexuality may diminish. So don't loose your confidence, build the interest everyday.

MANAGEMENT

- Education
- Medical Management
- Assisted Reproductive Technologies

Education

- To improve general health eat healthy food, fruits, vegetables and juices
- Reduce consumption of cholesterol
- Woman must store a minimum amount of body weight
- Nutritional supplements such as folic acid, vitamin C, B-Complex, Vitamin B-6, Zinc and iron
- Avoid coffee, tea, alcohol, smoking
- Regular exercise
- Reduce stress by relaxation techniques such as yoga, meditation, rest and sleep.

For men

- Avoidance of tight and warm undergarments
- Avoid hot water bath
- Avoid too frequent intercourse, to increase sperm count

Medical Management

1. Treatment for infection
2. Hormone treatment
   a. Tab. Clomiphene citrate - 50mg
   b. Tab. Bromocriptine
   c. Human chorionic gonadotrophin

Assisted Reproductive Techniques

This procedure consists of the process to assist the reproduction by retrieving Oocytes from the Ovary or sperm from the testes or sometime involve the use of donor's egg. It depends on the diagnosis and type of infertility diagnosed.

Assisted Reproductive Technologies Include

- Invitro fertilization / embryo transfer (IVF/ET)
- Gamete intra fallopian transfer(GIFT)
- Zygote intra fallopian transfer(ZIFT)
- Intra - uterine insemination(IUI)
- ICSI (Intra cytoplasmic sperm injection)
- Ovum donation
- Surrogacy
- Adoption

Invitro fertilization / embryo transfer

- Tubal damage
- Oligospermia, poor motility, antisperm antibodies
- Cervical problems
- Endometriosis
- Unexplained infertility

IVF is the original "test tube baby" technique. It is most widely practical assisted conception procedure in the world.

In IVF eggs are aspirated from the ovary and layered with 10,000 Ova, outside the body (Invitro - latin word "in a glass"). After about 24 hours the eggs are examined for fertilization and division, these (48-60/Hrs) fertilized eggs (embryos) are then place in the women's uterus, after by passing the fallopian tubes.

- **Gamete - intra fallopian transfer (GIFT)**

Gift differs from IVF. The sperm is transferred to the fallopian tube allowed for natural fertilization. This method used for cervical barriers.

- **Zygote intra fallopian transfer (ZIFT)**

Ova are fertilized in vitro, and embryos are then introduced into the fallopian tube.

- **Artificial Insemination**

In this there are three methods

a. Artificial Insemination by husband (AIH)
b. Artificial Insemination by donor (AID)
c. Sperm Intra Fallopian Tube transfer (SIFT)

- **Ovum donation**

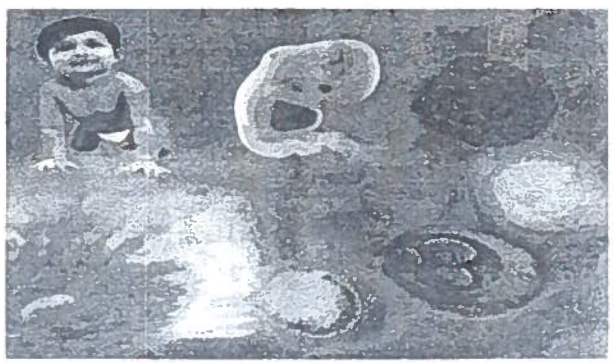
Ovum donated by another woman is fertilized and then introduced into the fallopian tube.

- **Surrogacy**

The fertilized ovum is implanted into a carrier woman.

- **Adoption**

It is the legal act of permanently placing a child with a parent or parents other than birth.



- Seek emotional support and guidance from a counselor or support group.
- Realize that you must live and work in the fertile world, and manage your relationships with family members and friends.
- Support one another, and understand that this is a stressful time on both of you, no matter how each partner deals with it on the outside.
- Be gentle with yourself; avoid uncomfortable social situations - holidays, baby showers, certain family gatherings.
- Going to doctor appointments together is important, so you both understand the tests and procedures and what the medical team is looking for from both partners.

- Make a list of your questions and concerns to take to your appointments, so you don't forget to ask.
- Continue appointment with an open mind and a positive attitude - never say never.
- Try not to feel guilty about baby-making sex.
- Also try Making dates to have 'family sex' during the 'non fertile' times of the cycle to maintain some intimacy in your relationship.
- Lowering your expectations at this time of infertility treatment is stressful, learn to say "no" to other commitments that are not absolutely necessary.

II. CAUSES OF INFERTILITY IN MALE ARE DUE TO

Abnormalities of the male genitalia

- Undescended testes
- Varicocele
- Sperm abnormalities (oozospermia, poor sperm mobility)
- Genetic abnormalities
- Infection (eg. Orchitis, mumps)
- Hormonal imbalance
- Endocrine abnormalities
- Hypothyroidism
- Impotence
- Premature ejaculation
- Ignorance of proper sex
- Poor diet

Decreased sperm production is due to

- Elderly age
- Obesity, smoking and alcoholism
- Diabetes mellitus, hypertension
- Working in hot environment
- Radiation and x-ray

INVESTIGATION

Investigation should be done when there is a failure to conceive after one year of regular unprotected exposure with adequate frequency.

IN FEMALE

I. The medical history

- Hormonal disorders of hypothalamus, pituitary gland or the thyroid gland
- Surgery of the abdomen affecting the reproductive organ
- Obesity or anorexia nervosa which may affect ovulation
- Alcohol, nicotine, drugs
- Life situation (stress)
- Difficulty with sexual intercourse

II. Clinical Examination

- Blood investigations
- Ultrasonography
- Hysterosalpingography & Hysteroscopy
- Laparoscopy

IN MALE

I. Health history and physical examination

- Endocrine disorders (e.g. diabetes)
- Infectious disease
- Genetic conditions
- Medications affecting reproductive function
- Alcohol, nicotine, drugs
- Life situations (Stress)
- Toxic environment work in the chemical industry, contact with x-rays and heat
- Difficulty with sexual intercourse

II. Clinical Examination

- Semen analysis
- Testicular biopsy

There are several coping strategies to help you get through this difficult stage

- Educate yourself. Read and learn as much as you can about infertility.
- Communicate with others who are or have experienced difficulty. Conceiving will help you realize you are not alone. However it's important to remember everyone is unique and your situation is not exactly like anyone else's.

- If you are 35 years of age and have been trying to conceive for 6 months or longer, or are under 35 and have been trying for 1 year or more, you should make an initial appointment with your doctor.
- Be prepared for the fact that your feelings and your partner's feelings may differ, in different ways and stages.
- Don't expect your partner to always feel as you do. Share when you can but don't press it.
- Allow yourself private time to work through your thoughts and feelings.
- Communicate emotions and fears to your partner on a regular basis as much as you can.
- Get support. Try sharing your problem with supportive friends or other family members.